Commonwealth of Kentucky
Division for Air Quality

PERMIT APPLICATION SUMMARY FORM

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GENERAL INFORMATION:

Name:	Crane Composites Inc.(formerly Lasco)
Address:	8015 Dixon Drive, Florence KY 41042
Date application received:	6/15/2004
SIC/Source description:	3083
Source ID #:	21-015-00025
Source A.I. #:	204
Activity #:	APE20040001
Permit number:	V-05-027

APPLICATION TYPE/PERMIT ACTIVITY:

[X] Initial issuance	[ ] General permit
[ ] Permit modification	[ ]Conditional major
__Administrative	[X] Title V
__Minor	[ ] Synthetic minor
__Significant	[X] Operating
[ ] Permit renewal	[ ] Construction/operating

COMPLIANCE SUMMARY:

[ ] Source is out of compliance [ ] Compliance schedule included

[X] Compliance certification signed

APPLICABLE REQUIREMENTS LIST:

[ ] NSR	[ ] NSPS	[X] SIP
[ ] PSD	[X] NESHAPS	[ ] Other
[ ] Netted out of PSD/NSR	[ ] Not major modification per 401 KAR 51:001, 1(116)(b)	

MISCELLANEOUS:

[ ] Acid rain source
[ ] Source subject to 112(r)
[ ] Source applied for federally enforceable emissions cap
[ ] Source provided terms for alternative operating scenarios
[X] Source subject to a MACT standard
[ ] Source requested case-by-case 112(g) or (j) determination
[ ] Application proposes new control technology
[X] Certified by responsible official
[X] Diagrams or drawings included
[ ] Confidential business information (CBI) submitted in application
[X] Pollution Prevention Measures
[X] Area is non-attainment (list pollutants): ozone

EMISSIONS SUMMARY:

Pollutant	Actual (tpy)	Potential (tpy)
PM/PM_{10}	0. 92	0.92
SO_2	0.07	0.07
NOx	12.09	12.09
CO	10.15	10.15
VOC	45.21	1333.18
LEAD	0	0
HAP > 10 tpy (by CAS)		
Styrene	44.63	1315.97
Cumene	0.56	16.59
Methyl Methacrylate	4.02	118.48
Ethyl Benzene	0.08	2.37
Xylene	0.4	11.8

SOURCE PROCESS DESCRIPTION:
Crane Composites Inc.(formerly Lasco) produces several different types of fiberglass panel products on three different automated production lines. The panel products include both flat sheets and corrugated sheets. The finished sheets are shipped in palletized coils or pre-cut sheet bundles.

The production lines are called "Line Two", "Line Three", and "Line Four". Lines two and three are known as the narrow-lines and produce panels up to about four feet in width. Line four is known as the wide-line and produces panels up to about nine feet in width. In the Title V permit, the abbreviations L02, L03, and L04 are used to designate at which production line a piece of equipment is located.

All three production lines use the same basic process steps to manufacture fiberglass panels. The following eleven steps are required to produce the most complicated panel, a corrugated gelcoated panel. Less complicated panels may omit one or more of these steps:

1) **Preparation of Resin** - the resin mixture is blended in a special mix tank in a separate area of the plant building. The resin mixture is brought to the production line by forklift.

2) **Deployment of the Lower Polyester Film** - a large motorized roller assembly mounted at the beginning of the line unrolls the lower polyester film and pulls it through the production line.

3) **Application of Resin to Lower Film** - the resin mixture is pumped from the mix tank to the production line through a static mixing section where the final catalyst is blended into the resin. The catalyzed resin mixture is poured onto the center of the lower film as the film is pulled through the line. A "doctor blade" spreads the resin mixture out to the proper thickness.

4) **Application of Fiberglass Strands to Lower Film** - a long rotating knife assembly draws together numerous bundles of glass roving from bundles stored on special overhead shelves and cuts the roving into short glass fiber strands. The strands are allowed to drop into the wet resin film moving beneath the knife assembly.

5) **Wetout of Fiberglass Strands** - a pair of wetout rollers and a "quiet" section of line help to wet the fiberglass strands with the resin mixture. The resin is also heated to initiate the curing process.

6) **Application of Gelcoat to Upper Polyester Film** - is only required for a gelcoated panel. A roller assembly unrolls the upper polyester film above the line. The gelcoated mixture is catalyzed, poured out, and spread onto this film in the same fashion as the resin on the lower film. The catalyzed gelcoat is heated in a small oven and allowed to cure to the "tacky" stage. The tacky gelcoat-covered upper film is then conducted down to the resin-covered lower film.

7) **Combination of Upper and Lower Films** - the lower resin-covered film and upper gelcoat-covered films are pressed together in a "pinch roller".

8) **Corrugation-Forming in the Gel Oven** - the still uncured panel is pulled through a long direct-fired gas oven. A series of special hardwood forms called shoes are used to gradually form the proper corrugations in the panel. The heat of the oven starts to cure the resin which hardens the panel.

9) **Final Curing in the Cure Oven** - the corrugated panel is pulled through another oven at a higher temperature. This completes the curing process.

10) **Cutting the Panel to Size** - after leaving the cure oven, the panel sides are trimmed to size, and the corrugated panel is cut to length by a flying crosscut saw.

11) **Preparation of Finished Panels for Shipment** - the corrugated panels are stacked together onto a wooden pallet and either transported to a waiting truck or to the warehouse area.

Crane Composites Inc. submitted a Title V application to the Division on December 14, 1999. They submitted a revised Title V application on June 15, 2004 and October 6, 2006. Crane Composites Inc. is an existing major source for volatile organic compounds. A regenerative thermal oxidizer is currently in operation to control the source-wide emissions of VOCs. Nonattainment new source review (401 KAR 51:052) does not apply because the source was constructed prior to the classification date of that regulation and has had no major modifications since then. There is a MACT standard - 40 CFR 63 Subpart WWWW, National Emissions Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production - that does apply to Crane Composites Inc. This MACT will require Crane Composites to reduce HAP emissions by 95%.

Operation Cap:
Crane Composites has to reduce HAP emissions by 95% as required by 40 CFR Subpart WWWW.